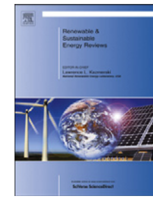
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Publisher's note

The Article of the Future-A New Online Article Experience for Increasing Research Efficiency, Learning, and Discovery

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Since the invention of the written word, the transmission of knowledge by publication has remained largely unaltered. The first wholly scientific journal was published in 1665 (The Philosophical Transactions of the Royal Society). While this method of knowledge transmission has served science well through the last 347 years, it fails to take advantage of newer advances in electronic communication technologies. In particular, current formats of publication tend to be static, require additional effort on the part of readers to locate ancillary but important or supporting information, have little or no interactive features, does not in itself facilitate discovery, has no innate search functions or tools, is a one way communication from author to reader, and other limitations.

Now, in partnership with researchers in various scientific disciplines, Elsevier has recently launched a novel intuitive online article format. We are pleased to announce the so-called "Article of the Future," which marks the next generation in publishing, providing researchers with a simple-to-read, online design with new enriched and interactive content, allowing true immersion in the context of the subject matter. For *Journal of Aerosol Science* authors this means greater exposure and a better opportunity to showcase their work, giving it more credibility and increasing the likelihood of use and citation.

With the transition from print to online publishing, the layout and presentation of scientific articles has remained relatively unchanged, still following an almost 350-year-old format. In today's world where information moves electronically, quickly, and where the scientific levels of knowledge advance rapidly, so too should the communication of research. To this end, in 2009 Elsevier initiated the "Article of the Future" project to improve the format and electronic communication of research. The key objectives of this (multi-year and still ongoing) project are:

- To improve scientific communication by publishing the full richness of scientific research
- To offer authors the right tools for communicating diverse and discipline specific results
- To provide users an optimal reading experience to effectively obtain maximum insight

Following the idea that significant publishing improvements can be made by approaching these goals in a discipline-specific manner, the first milestone of the "Article of the Future" project was the release of a new article format for all Cell Press Life Sciences journals in 2010 (www.cell.com). The positive reception of this format led to a continuation of the project for a variety of other scientific disciplines, ranging from mathematics and parasitology to business development. A major milestone in this second phase of the project was the release of multiple complete prototypes in 2011 (www.articleofthefuture.com).

Following very positive feedback on these prototypes, all Elsevier journals including Journal of Aerosol Science will now be launched with a three-pane article view, which separates navigation (left pane) and value-added enhancements (right pane) from the core article (middle pane). The left pane displays a table of contents for easy navigation, with clickable section headers and thumbnails of images and tables. The middle pane features the article text "enriched" with interactive content such as Google Maps and interactive plots and graphics. The right pane (to be launched in July 2012) will feature discipline-specific applications to enable users to put information into the context of their field.

The "Article of the Future" project was initially undertaken in collaboration with some 140 scientists, across various disciplines and in different stages of their scientific careers. With the input of these scientists, 13 prototypes were created and presented to the research community. The main findings are listed below:

- Users immediately start focusing on the article text, then gradually and naturally discover the left navigation first and the right pane second. Everything seems to fall into place at the right time, as users interact with the content rather than with widgets, indicating that the format is an intuitive one.
- Using the "Article of the Future" design, users spend a larger fraction of their reading time online. Users also less often download the PDF for further reading and inspection.
- With the "Article of the Future" design, part of the additional online time is used to inspect the extra context and content provided–with readers indicating very high levels of satisfaction.
- The "Article of the Future" design is especially effective in determining whether an article is relevant or not to the individual.

Overall, the feedback on the "Article of the Future" design has been extremely positive. Specific comments from those who have been exposed to this format have ranged from appreciation regarding the intuitive nature of all areas of the design, easy navigation provided through the left-hand pane, side-by-side display of text and images, additional information on references at the right, and interactivity in graphs and plots.

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For all readers interested in the field of Journal of Aerosol Science, the ''Article of the Future'' will save time by eliminating the need to search for materials referenced by the author. It also enables them to interact with the content to explore subjects further and in more detail, providing deeper insights in a more efficient and effective manner. Specifically, *Journal of Aerosol Science* authors will be able to achieve a higher level of communication and engagement with the scientific community, and this design will enrich and extend the reach of their research. Alongside references to authors and other published works, the ''Article of the Future'' will offer access to interactive graphs and charts, external data sets and data sources and a variety of multimedia resources. Thus, this new article format will advance the entire research process for the author and reader.

In summary, our work with the ''Article of the Future'' thus far indicates that the new format provides an effective and more satisfying online experience for readers; it allows readers to determine the relevancy of an article more quickly, and for relevant articles it delivers more information and context. To help us in the continuing quest of creating an ''Article of the Future'' that is relevant for you, we encourage you to use this exciting format and send us your comments. In particular, what interactive content or additional context would you like to see in or next to a *Journal of Aerosol Science* article? Of course, we are particularly interested in hearing about specific requirements that will be relevant to *Journal of Aerosol Science*, and your ideas on how new technologies can be exploited in facilitating communication, learning and discovery through this new format.